COMMITTEE REPORT

TO: Patrick O'Donnell

Clerk of the Legislature

FROM: Senator Sara Howard

Chair, Health and Human Services Committee

DATE: 11.13.2020

RE: Health and Human Services Committee Report and Recommendations on

Regulated Occupations within Committee Jurisdiction - Medical

Radiographer and Limited Medical Radiographer

GENERAL INFORMATION

I. Occupation Regulated

- A) Medical Radiographer and Limited Medical Radiographer
- II. Name of Occupational Board Responsible for Enforcement
 - A) Per Nebraska Revised Statutes Section <u>38-161</u>, the Board of Medical Radiography provides recommendations to the Department of Health and Human Services regarding the issuance or denial of credentials, and provides recommendations to the Department of Health and Human Services regarding rules and regulations to carry out the Uniform Credentialing Act.
- III. Public Purpose and Assumptions Underlying License Creation
 - A) A person holding the Medical Radiographer license may practice medical radiography for diagnostic purposes on any part of the human body for interpretation by and under the direction of a licensed practitioner, except for interpretive fluoroscopic procedures.

A person holding the limited medical radiographer license may perform medical radiography for diagnostic purposes on limited regions of the human body using routine procedures for interpretation by and under the direction of a licensed practitioner. The Limited Radiographer may be licensed in one or more of the following categories: chest; extremities; skull & sinus; spine; ankle & foot; and abdomen.

The licenses were created to protect the public health, safety, and welfare.

- IV. Number of Regulated Professionals in Nebraska
 - A) There are 2,719 licensed Radiographers in Nebraska, including 2,378 Medical Radiographers and 341 Limited Medical Radiographers.

BOARD MEMBERSHIPS AND MEETINGS

- I. Number of Members
 - A) There are five members of the Board of Medical Radiography.
- II. Who Appoints Members of the Board / Is Legislative Approval Required?
 - A) The Board of Health appoints the members of the Board of Medical Radiography. Legislative approval is not required.

III. Term Length

- A) The length of term for service on the Board of Medical Radiography is up to two consecutive five year terms, on a rotating basis.
- IV. Qualifications for Membership of the Board
 - A) The Board of Medical Radiography is made up of five professional members, including four medical radiographers and one limited radiographer. The professional members shall have held and maintained an active credential and be and have been actively engaged in the practice of his or her profession for a period of five years just preceding his or her appointment and shall maintain such credential and practice while serving as a board member.
- V. The Number of Meetings Required Per Year / Meetings Actually Held
 - A) For fiscal year (FY) 2014-2015: Meetings Required 2; Meetings Held 3.
 - B) For FY 2015-2016: Meetings Required 2; Meetings Held 2.
 - C) For FY 2016-2017: Meetings Required 2; Meetings Held 2.
 - D) For FY 2017-2018: Meetings Required 2; Meetings Held 2.
 - E) For FY 2018-2019: Meetings Required 2; Meetings Held 3.
- VI. Annual Budget Information for the Previous Five Years
 - A) The Board of Medical Radiography is cash-funded from licensure fees. Funds for credentialed occupations may come from interest earned on the Professional and Occupational Credentialing Cash Fund, certification and verification of credentials, administrative fees, reinstatement fees, general funds and federal funds, fees for miscellaneous services, gifts, and grants.
 - B) For FY 2014-2015: \$17,347

- C) For FY 2015-2016: \$15,211
- D) For FY 2016-2017: \$19,280
- E) For FY 2017-2018: \$10,286
- F) For FY 2018-2019: \$24,205

VII. Statement from Occupational Board on Effectiveness of Regulations

A) The Chair of the Board of Medical Radiography stated "As the Chair of the Board of Medical Radiography, [he has] spent 10 years watching our Board operate in a fair, transparent, responsible, and equitable manner. As a whole, the Board of Medical Radiography understands that we have a statutory and fiduciary responsibility to the State of Nebraska and to those that seek healthcare in our state. The Board also recognizes the responsibility it has to those holding a licensure for Radiography and takes deliberate steps to ensure that the practices observed by the Board are fair and equitable and that any punitive actions are proportionate to the infraction presented by the investigative division."

AUTHORIZATION

- I. Statutory Authorization
 - A) Statutory authorization for the Medical Radiographer and Limited Medical Radiographer occupations may be found in the Nebraska Revised Statutes, sections 38-1901 to 38-1920, which may be cited as the Medical Radiography Practice Act. For text of the Nebraska statutes relating to the Medical Radiographer and Limited Medical Radiographer occupations, see Appendix A.
- II. Other Authorization
 - A) Rules and regulations regarding the licensure of persons performing medical radiography may be found in the Nebraska Administrative Code <u>Title 180, Chapter 16</u>.

CREDENTIALING

- I. Number of Licenses, Certifications, or Registrations Issued In Past Five Years
 - A) There were 2,719 licenses issued in the past five years, including 2,378 Medical Radiographer licenses and 341 Limited Medical Radiographer licenses.
- II. Number of Licenses, Certifications, or Registrations Denied in Past Five Years
 - A) There were three licenses denied in the past five years, including one Medical Radiographer license and two Limited Medical Radiographer licenses.

- B) Grounds for denial include misrepresentation of material facts, failure to complete required examinations, failure to provide licensure fees, and immoral or dishonorable conduct, amongst other grounds.
- III. Number of Licenses, Certifications, or Registrations Revoked in Past Five Years
 - A) There were three Medical Radiographer licenses revoked in the past five years.
 - B) Reasons for revocations include failure to file mandatory reports, felony convictions, and other state actions.
- IV. Number of Licenses, Certifications, or Registrations Penalized in Past Five Years
 - A) There were 22 licenses penalized in the past five years, including 13 Medical Radiographer licenses and 9 Limited Medical Radiographer licenses.
 - B) Reasons for penalization include practice beyond scope, controlled substance dependence, practice while impaired, unprofessional conduct, failure to comply with federal or state law, mild alcohol use disorder, misdemeanor convictions, failure to file mandatory reports, probation violation, severe alcohol use disorder, and misrepresentation of material facts.
- V. Comparison of How Other States Regulate This Occupation
 - A) All but four states require licensure to practice as a Medical Radiographer or Limited Medical Radiographer. The American Society of Radiologic Technologists maintains a website with a list of individual state licensure information, which may be found here.
- VI. What Is The Potential Harm if This Occupation Is No Longer Licensed, Certified, or Regulated?
 - A) If professions related to medical radiography were no longer licensed, certified, or regulated, it could be severely detrimental to the public health, safety, and welfare. The medical radiography professions entail the use of radiation. Improper usage, without adequate education, training, or experience, could cause biological changes in the human body, breaking down DNA structure or causing death. Proper training in proper technique helps reduce overexposure to radiation to the patient. Without regulation, it would be much more difficult to hold practitioners responsible, and it would be detrimental to the public health, safety, and welfare.

COMMITTEE RECOMMENDATION ON CONTINUATION, MODIFICATION, OR TERMINATION OF OCCUPATIONAL REGULATIONS

Regulated occupations under the purview of the Health and Human Services Committee are unique in that through the Nebraska Regulation of Health Professions Act (Neb. Rev. Stat. Sections 71-6201 to 71-6229), health professions which are not licensed or regulated, or health professions that wish to change their scope of practice, go through a three-stage credentialing process.

Credentialing review is a three-stage process conducted by the following review bodies in the following order:

- 1) The review of an ad hoc technical review committee appointed by the Director of the Division of Public Health;
- 2) The review of the State Board of Health;
- 3) The review of the Director of the Division of Public Health.

The three review bodies each create their own independent report on each proposal. All reports created by the review process are available to members of the Health and Human Services Committee to assist them during their review of any bills that might arise from credentialing review proposals. These reports include recommendations regarding the level of licensure of the health profession. These reports are advisory to the Legislature, and only the action of the Legislature may create changes in the regulatory status of a profession. These reports represent expert input into possible public health and safety aspects of credentialing review proposals, and the nine-month process is overseen by those with experience in the provision of health-related or medical services.

The licenses, certifications, and registrations overseen by the Board of Medical Radiography and the Department of Health and Human Services are intended to protect the health, safety, and welfare of Nebraskans. The current regulation of the Medical Radiographer and Limited Medical Radiographer occupations by licensure is appropriate and balanced and does not need modification at this time.

APPENDIX A

STATUTES PERTAINING TO MEDICAL RADIOGRAPHY PRACTICE ACT

38-1901. Act. how cited.

Sections 38-1901 to 38-1920 shall be known and may be cited as the Medical Radiography Practice Act.

Source: Laws 2007, LB463, § 639; Laws 2008, LB928, § 5; Laws 2010, LB849, § 1.

38-1902. Definitions, where found.

For purposes of the Medical Radiography Practice Act and elsewhere in the Uniform Credentialing Act, unless the context otherwise requires, the definitions found in sections 38-1903 to 38-1913 apply.

Source: Laws 2007, LB463, § 640; Laws 2008, LB928, § 6; Laws 2010, LB849, § 2.

38-1903. Board. defined.

Board means the Board of Medical Radiography.

Source: Laws 2007, LB463, § 641.

38-1904. Interpretative fluoroscopic procedures, defined.

Interpretative fluoroscopic procedures means the use of radiation in continuous mode to provide information, data, and film or hardcopy images for diagnostic review and interpretation by a licensed practitioner as the images are being produced.

Source: Laws 2007, LB463, § 642.

38-1905. Licensed practitioner, defined.

Licensed practitioner means a person licensed to practice medicine, dentistry, podiatry, chiropractic, osteopathic medicine and surgery, or as an osteopathic physician.

Source: Laws 2007, LB463, § 643.

38-1905.01. Limited computed tomography radiographer, defined.

Limited computed tomography radiographer means a person licensed pursuant to section 38-1917.01 to practice medical radiography restricted to computed tomography.

Source: Laws 2008, LB928, § 8.

38-1906. Limited radiographer, defined.

Limited radiographer means a person licensed to practice medical radiography pursuant to section 38-1916. Limited radiographer does not include a person certified under section 38-3012.

Source: Laws 2007, LB463, § 644.

38-1907. Medical radiographer, defined.

Medical radiographer means a person licensed pursuant to subsection (1) of section 38-1915 to practice medical radiography.

Source: Laws 2007, LB463, § 645; Laws 2008, LB928, § 7.

38-1908. Medical radiography, defined.

Medical radiography means the application of radiation to humans for diagnostic purposes, including, but not limited to, utilizing proper:

- (1) Radiation protection for the patient, the radiographer, and others;
- (2) Radiation-generating equipment operation and quality control;
- (3) Image production and evaluation;
- (4) Radiographic procedures;
- (5) Processing of films;
- (6) Positioning of patients;
- (7) Performance methods to achieve optimum radiographic technique with a minimum of radiation exposure; and
- (8) Patient care and management as it relates to the practice of medical radiography.

Source: Laws 2007, LB463, § 646; Laws 2010, LB849, § 3.

38-1908.01. Nuclear medicine technologist, defined.

Nuclear medicine technologist means a person who meets the requirements for training and experience for nuclear medicine technology under the Radiation Control Act and the rules and regulations adopted and promulgated under the act.

Source: Laws 2008, LB928, § 9.

Cross References

Radiation Control Act, see section 71-3519.

38-1908.02. Patient care and management; defined.

Patient care and management, as it relates to the practice of medical radiography, includes, but is not limited to:

- (1) Infection control:
- (2) Patient transfer and movement:
- (3) Assisting patients with medical equipment:
- (4) Routine monitoring:
- (5) Medical emergencies:
- (6) Proper use of contrast media; and
- (7) Patient safety and protection, including minimizing and monitoring patient radiation exposure through utilizing proper professional standards and protocols, including the principle of as low as reasonably achievable.

Source: Laws 2010, LB849, § 4.

38-1909. Radiation, defined.

Radiation means ionizing radiation and nonionizing radiation as follows:

- (1) Ionizing radiation means gamma rays, X-rays, alpha and beta particles, high-speed electrons, neutrons, protons, and other atomic or nuclear particles or rays but does not include sound or radio waves or visible. infrared, or ultraviolet light; and
- (2) Nonionizing radiation means (a) any electromagnetic radiation which can be generated during the operation of electronic products as defined in section 71-3503 to such energy density levels as to present a biological hazard to occupational and public health and safety and the environment, other than ionizing electromagnetic radiation, and (b) any sonic, ultrasonic, or infrasonic waves which are emitted from an electronic product as defined in section 71-3503 as a result of the operation of an electronic circuit in such product and to such energy density levels as to present a biological hazard to occupational and public health and safety and the environment.

Source: Laws 2007, LB463, § 647.

38-1910. Radiation-generating equipment, defined.

Radiation-generating equipment means any manufactured product or device, component part of such a product or device, or machine or system which during operation can generate or emit radiation except devices which emit radiation only from radioactive material.

Source: Laws 2007, LB463, § 648.

38-1911. Sources of radiation, defined.

Sources of radiation means any radioactive material, any radiation-generating equipment, or any device or equipment emitting or capable of emitting radiation or radioactive material.

Source: Laws 2007, LB463, § 649.

38-1912. Undesirable radiation, defined.

Undesirable radiation means radiation in such quantity and under such circumstances as determined from time to time by rules and regulations adopted and promulgated by the department.

Source: Laws 2007, LB463, § 650.

38-1913. X-ray system, defined.

X-ray system means an assemblage of components for the controlled production of X-rays, including, but not limited to, an X-ray high-voltage generator, an X-ray control, a tube housing assembly, a beam-limiting device, and the necessary supporting structures. Additional components which function with the system are considered integral parts of the system.

Source: Laws 2007, LB463, § 651,

38-1914. Board; members; qualifications; terms; meetings.

The board shall consist of four medical radiographers and one limited radiographer. Of the first four medical radiographers appointed, one shall be appointed for a term of one year, one shall be appointed for a term of two years, one shall be appointed for a term of three years, and one shall be appointed for a term of four years. The first limited radiographer shall be appointed for a term of five years. Thereafter each appointment shall be for a term of five years. The board shall meet at least two times per calendar year.

Source: Laws 2005, LB 453, § 2; R.S.Supp.,2006, § 71-3512; Laws 2007, LB463, § 652.

38-1915. Medical radiographer; requirements.

- (1) A person licensed by the department, with the recommendation of the board, as a medical radiographer may practice medical radiography on any part of the human anatomy for interpretation by and under the direction of a licensed practitioner, including computed tomography but excluding interpretative fluoroscopic procedures, and may use fluoroscopy in conjunction with a certified registered nurse anesthetist as authorized in section 38-711.
- (2) An applicant for a license as a medical radiographer shall:
- (a) Complete an educational program in radiography approved by the board pursuant to subsection (1) of section 38-1918;
- (b) Complete an application in accordance with the Uniform Credentialing Act; and
- (c) Successfully complete an examination approved by the board.
- (3) Presentation of proof of registration in radiography with the American Registry of Radiologic Technologists is proof of meeting the requirements of subdivisions (2)(a) and (c) of this section.

Source: Laws 1987, LB 390, § 23; Laws 1995, LB 406, § 46; Laws 1997, LB 752, § 181; Laws 2002, LB 1021, § 75; Laws 2006, LB 994, § 104; R.S.Supp.,2006, § 71-3515.01; Laws 2007, LB463, § 653; Laws 2008, LB928, § 10.

Cross References

Credentialing, general requirements and issuance procedures, see section 38-121 et seq.

38-1916. Limited radiographer; requirements; specific anatomical region.

- (1) A person licensed by the department, with the recommendation of the board, as a limited radiographer may practice medical radiography on limited regions of the human anatomy, using only routine radiographic procedures, for the interpretation by and under the direction of a licensed practitioner, excluding computed tomography, the use of contrast media, and the use of fluoroscopic or mammographic equipment. An applicant for a license as a limited radiographer shall successfully complete an examination approved by the board, as described in subdivision (2)(a) of section 38-1918 and at least one of the anatomical regions listed in subdivision (2)(b) of such section or successfully complete an examination approved by the department, as described in subsection (3) of section 38-1918.
- (2) Each license issued shall be specific to the anatomical region or regions for which the applicant has passed an approved examination, except that an applicant may be licensed in the anatomical region of Abdomen upon successful passage of the examinations described in subdivisions (2)(a) and (2)(b)(iv) of section 38-1918 and upon a finding by the department, with the recommendation of the board, that continued provision of service for a community would be in jeopardy.

Source: Laws 2007, LB463, § 654.

Cross References

Credentialing, general requirements and issuance procedures, see section 38-121 et seq.

38-1917. Student; provisions not applicable; temporary medical radiographer license; term; applicability of section.

- (1) The requirements of sections 38-1915 and 38-1916 do not apply to a student while enrolled and participating in an educational program in medical radiography who, as a part of an educational program, applies X-rays to humans while under the supervision of the licensed practitioners or medical radiographers associated with the educational program. Students who have completed at least twelve months of the training course described in subsection (1) of section 38-1918 may apply for licensure as a temporary medical radiographer. Temporary medical radiographer licenses issued under this section shall expire eighteen months after issuance and shall not be renewed. Persons licensed under this section as temporary medical radiographers shall be permitted to perform the duties of a limited radiographer licensed in all anatomical regions of subdivision (2)(b) of section 38-1918 and Abdomen.
- (2) This section shall not apply to a temporary credential issued as provided under section 38-129.01. **Source:** Laws 2007, LB463, § 655; Laws 2017, LB88, § 60.

38-1917.01. Limited computed tomography radiographer; requirements; nuclear medicine technologist; activities authorized.

- (1) A person licensed by the department, with the recommendation of the board, as a limited computed tomography radiographer may practice medical radiography restricted to computed tomography. An applicant for a license as a limited computed tomography radiographer shall:
- (a) Complete an application in accordance with the Uniform Credentialing Act;
- (b) Be certified by (i) the Nuclear Medicine Technology Certification Board or (ii) the American Registry of Radiologic Technologists in nuclear medicine technology; and
- (c) Be certified by the American Registry of Radiologic Technologists in computed tomography.

(2) A nuclear medicine technologist may perform computed tomography without being licensed under the Medical Radiography Practice Act if such practice is limited to X-rays produced by a combination nuclear medicine-computed tomography system and administered as an integral part of a nuclear medicine procedure that uses a computed tomography protocol for purposes of attenuation correction and anatomical localization only and if the nuclear medicine technologist has received documented device-specific training on the combination nuclear medicine-computed tomography system.

Source: Laws 2008, LB928, § 11.

Cross References

Credentialing, general requirements and issuance procedures, see section 38-121 et seq.

38-1917.02. Student; provisions not applicable; temporary limited computed tomography radiographer license; term; applicability of section.

(1) The requirements of section 38-1917.01 do not apply to a student while enrolled and participating in an educational program in nuclear medicine technology who, as part of the educational program, applies X-rays to humans using a computed tomography system while under the supervision of the licensed practitioners, medical radiographers, or limited computed tomography radiographers associated with the educational program. A person registered by the Nuclear Medicine Technology Certification Board or the American Registry of Radiologic Technologists in nuclear medicine technology may apply for a license as a temporary limited computed tomography radiographer. Temporary limited computed tomography radiographer licenses issued under this section shall expire twenty-four months after issuance and shall not be renewed. Persons licensed under this section as temporary limited computed tomography radiographers shall be permitted to perform medical radiography restricted to computed tomography while under the direct supervision and in the physical presence of licensed practitioners, medical radiographers, or limited computed tomography radiographers.

(2) This section shall not apply to a temporary credential issued as provided under section 38-129.01.

Source: Laws 2008, LB928, § 12; Laws 2017, LB88, § 61.

38-1918. Educational programs; testing; requirements.

- (1)(a) The educational program for medical radiographers shall consist of twenty-four months of instruction in radiography approved by the board which includes, but is not limited to:
- (i) Radiation protection for the patient, the radiographer, and others;
- (ii) Radiation-generating equipment operation and quality control;
- (iii) Image production and evaluation;
- (iv) Radiographic procedures;
- (v) Processing of films;
- (vi) Positioning of patients;
- (vii) Performance methods to achieve optimum radiographic technique with a minimum of radiation exposure; and (viii) Patient care and management as it relates to the practice of medical radiography.
- (b) The board shall recognize equivalent courses of instruction successfully completed by individuals who are applying for licensure as medical radiographers when determining if the requirements of section 38-1915 have been met.
- (2) The examination for limited radiographers shall include, but not be limited to:
- (a) Radiation protection, radiation-generating equipment operation and quality control, image production and evaluation, radiographic procedures, and patient care and management; and
- (b) The anatomy of, and positioning for, specific regions of the human anatomy. The anatomical regions shall include at least one of the following:
- (i) Chest;
- (ii) Extremities;
- (iii) Skull and sinus;
- (iv) Spine: or
- (v) Ankle and foot.
- (3) The examination for limited radiographers in bone density shall include, but not be limited to, basic concepts of bone densitometry, equipment operation and quality control, radiation safety, and dual X-ray absorptiometry (DXA) scanning of the finger, heel, forearm, lumbar spine, and proximal femur.
- (4) The department, with the recommendation of the board, shall adopt and promulgate rules and regulations regarding the examinations required in sections 38-1915 and 38-1916. Such rules and regulations shall provide for (a) the administration of examinations based upon national standards, such as the Examination in Radiography from the American Registry of Radiologic Technologists for medical radiographers, the Examination for the Limited Scope of Practice in Radiography or the Bone Densitometry Equipment Operator Examination from the American Registry of Radiologic Technologists for limited radiographers, or equivalent examinations that,

as determined by the board, meet the standards for educational and psychological testing as recommended by the American Psychological Association, the American Educational Research Association, and the National Council on Measurement in Education, (b) procedures to be followed for examinations, (c) the method of grading and the passing grades for such examinations, (d) security protection for questions and answers, and (e) for medical radiographers, the contents of such examination based on the course requirements for medical radiographers prescribed in subsection (1) of this section. Any costs incurred in determining the extent to which examinations meet the examining standards of this subsection shall be paid by the individual or organization proposing the use of such examination.

(5) No applicant for a license as a limited radiographer may take the examination for licensure, or for licensure for any specific anatomical region, more than three times without first waiting a period of one year after the last unsuccessful attempt of the examination and submitting proof to the department of completion of continuing competency activities as required by the board for each subsequent attempt.

Source: Laws 1987, LB 390, § 24; Laws 1990, LB 1064, § 21; Laws 1995, LB 406, § 47; Laws 1996, LB 1044, § 656; Laws 2000, LB 1115, § 74; Laws 2002, LB 1021, § 76; Laws 2003, LB 242, § 115; Laws 2006, LB 994, § 105; R.S.Supp.,2006, § 71-3515.02; Laws 2007, LB463, § 656; Laws 2010, LB849, § 5.

38-1919. Fees.

The department shall establish and collect fees for credentialing under the Medical Radiography Practice Act as provided in sections 38-151 to 38-157.

Source: Laws 2007, LB463, § 657.

38-1920. Dental hygienists and dental assistants; exemptions from act.

- (1) Persons authorized under the Dentistry Practice Act to practice as dental hygienists and dental assistants who meet the requirements of section 38-1135 shall not be required to be licensed under the Medical Radiography Practice Act.
- (2) The department may exempt certain users of sources of radiation from licensing requirements established under the Medical Radiography Practice Act when the board finds that the exemption will not constitute a significant risk to occupational and public health and safety and the environment.
- (3) Individuals who are currently licensed in the State of Nebraska as podiatrists, chiropractors, dentists, physicians and surgeons, osteopathic physicians, physician assistants, and veterinarians shall be exempt from the rules and regulations of the department pertaining to the qualifications of persons for the use of X-ray radiation-generating equipment operated for diagnostic purposes.

Source: Laws 2007, LB463, § 658.

Cross References

• Dentistry Practice Act, see section 38-1101.